CLAIMS

1. A method of processing media content, the method comprising:

generating a motion compensated prediction of a region of media content;

receiving an indication of whether there are first and second quantities of residual samples remaining for refining the prediction, on a per-region basis; and

adding of the first quantity of residual samples to the prediction to generate a refined prediction value, when so indicated; and

subtracting the second quantity of residual samples from the refined prediction value to generate a final representation, when so indicated.

2. A method according to claim 1, wherein the first and second residual samples are eight-bit signed samples.

3. A method according to claim 1, further comprising performing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

4. A method according to claim 1, wherein the encoded region of media content is a block or macroblock of a frame of received media content.

5. A method according to claim 1, wherein generating a prediction of media content is performed by a graphics processing accelerator under the control of a decoder application that is executing on a host computing system.

6. A method according to claim 1, further comprising:

sending any prediction control information necessary for generation of a motion compensated predicted region to an accelerator,

sending an indication to the accelerator of whether the first and second quantities of residual samples are to be applied, and

sending the first and second sets of residual samples to the accelerator when indicated;

performing subsequent processing and/or rendering at the accelerator.

7. A method according to claim 1, wherein the region is a block or macroblock of a frame of media content.

8. A storage medium comprising a plurality of executable instructions including a subset of which that, when executed, implement a method according to claim 1.

9. A computing system comprising:

a storage medium including a plurality of executable instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement a method according to claim 1.

10. A storage medium comprising a plurality of executable instructions which, when executed, implement a decoder of media content to generate a motion compensated prediction of at least a region of media content, to receive an indication of one or more sets of samples of residual information to further refine the prediction, and to add a first set of such samples to the prediction to generate a modified prediction, if indicated, and to subtract a second set of such samples from the modified prediction to generate a final motion compensated prediction of the region, if indicated.

11. A storage medium according to claim 10, wherein the executable instructions on the storage medium cause prediction control information necessary for generation of the motion compensated prediction and the indications of whether the first and/or second quantity of residual samples are to be applied and the actual first and second sets of residual samples to be sent to a communicatively coupled accelerator for subsequent processing and/or rendering.

12. A storage medium according to claim 10, wherein the region of media content is a block or macroblock of a frame.

13. A storage medium according to claim 10, wherein the first and second residual samples are eight-bit signed samples.

14. A storage medium according to claim 10, further comprising performing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

15. A computing system comprising:

a decoder application to receive a region of media content and control generation of decoded media content; and

an application program interface (API), communicatively coupling the decoder application with a hardware accelerator, wherein if the API receives an indication of one or more sets of residual samples, the first set of samples is added to a motion compensated prediction to generate a refinement of a prediction value, when so indicated, and a second set of samples is subtracted from the refined prediction value to generate a final representation, when so indicated.

16. A computing system according to claim 15, further comprising:

an accelerator, communicatively coupled to the decoder application via the API, to receive control and residual data information for subsequent processing and/or rendering.

17. A computing system according to claim 15, wherein the decoder application generates the residual data samples utilizing an inverse discrete cosine transformation of a decoded transform-domain representation of a total residual difference to be added to the motion compensated prediction for the region of media content.

18. A computing system according to claim 15, wherein the region of media content is a block or macroblock of a frame.

19. A computing system according to claim 15, further comprising:

a storage medium comprising a plurality of executable instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement the API.

20. A computing system according to claim 19, wherein the execution unit executes at least a subset of the plurality of executable instructions to implement the decoder application.